8. A method for passing dilution water into connection with a stock flow passed from a stock inlet header of a headbox in a paper or board machine, wherein dilution is carried out in at least two stages using in a first dilution stage first valves fitted with a larger mutual spacing at different points of width across the headbox and passing the dilution water through said first valves to desired points of width of the headbox according to the requirement of control of the basis weight of paper or board, and wherein in a second dilution stage (II), dilution water is passed into connection with a stock flow coming from the first dilution stage, said dilution water being controlled by means of second valves, the second valves being fitted with a denser spacing than the first valves of the first dilution stage, and that coarse control of the basis weight profile of the stock is carried out in the first dilution stage and fine control of the basis weight profile of the stock is carried out in the second dilution stage across the width of the machine.

9. The method of claim 8 wherein the dilution water used in the second stage of dilution has a solids, filler or fibre content which is substantially lower in percentage terms than that of the dilution water of the first stage of dilution.

10. The method of claim 8 wherein the dilution water used in the second dilution stage is selected from the group consisting of raw water and clarified white water.

11. The method of claim 8 wherein the dilution water of the first stage is white water.

12. A headbox of a paper or board machine comprising:

a stock inlet header;

a tube bank after the stock inlet header;

an intermediate chamber after the tube bank;

a turbulence generator after the intermediate chamber;

a slice cone after the turbulence generator from which stock is passed further onto a forming wire;

a plurality of first valves of a first dilution stage, through which dilution water is passed into connection with the stock passed from the inlet header to desired points across the width of the headbox so as to control the basis weight of the web in the first stage; and

a plurality of second valves of a second dilution stage, through which the dilution water of the second stage is passed into connection with the stock coming from the first dilution stage, wherein the first valves of the first dilution stage are spaced a longer distance from one another than the second valves of the second dilution stage, in which connection coarse control of the basis weight of the web is carried out by means of the first valves of the first dilution stage and fine control of the basis weight of the web is carried out by means of the second valves of the second dilution stage.

13. The headbox of claim 12 wherein the dilution water of the first dilution stage is passed into connection with the stock passed from the stock inlet header in connection with the tube bank, and that the dilution water of the second dilution stage is passed into connection with the stock coming from the first dilution stage in connection with the turbulence generator.

14. The headbox of claim 12 furthere comprising an inlet header for the dilution water of the second dilution stage, said inlet header supplying raw water as dilution water.

15. A method for controlling the basis weight profile of a stock flow across the width of a papermaking machine headbox, comprising the steps of:

passing dilution water into the stock flow from a stock inlet header of the headbox, the dilution water being passed through a plurality of first valves spaced a first distance apart to points of width of the headbox to produce a first stage diluted stock flow in which coarse control of the basis weight profile of the stock is carried out; and

passing dilution water into the first stage diluted stock flow through a plurality of second valves, the second valves being spaced apart a second distance which is less than the first distance to produce a second stage diluted stock flow in which fine control of the basis weight profile of the stock is carried out across the width of the machine.

16. The method of claim 15 wherein the dilution water used in the second stage of dilution has a solids, filler or fibre content which is substantially lower in percentage terms than that of the dilution water of the first stage of dilution.

17. The method of claim 15 wherein the dilution water used in the second dilution stage is selected from the group consisting of raw water and clarified white water.

18. The method of claim 15 wherein the dilution water of the first stage is white water.

REMARKS

Claims 8–18 remain pending in the application.